

# Tennessee Deaths 1999

August 2001

The Tennessee Department of Health

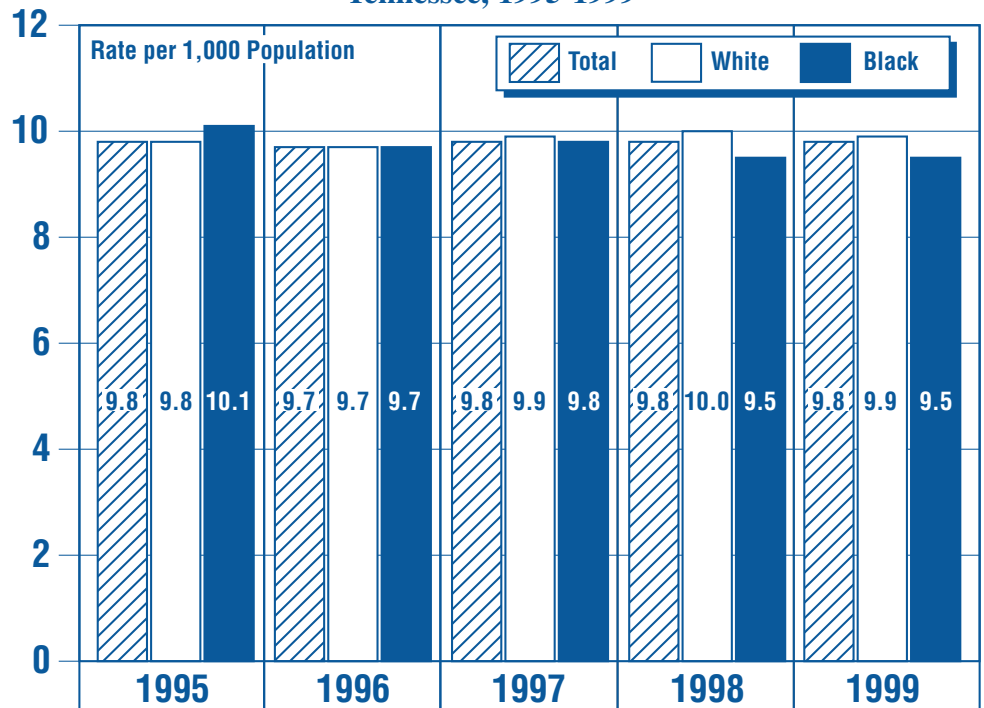
*Tennessee's death data provides information on 1999 final mortality data for state residents. Resident data includes events which occurred to residents of the state irrespective of where the events took place. Certificates filed with the Office of Vital Records supplied the data for this report.*

Over the past century, improvements in scientific technology and research have created a better quality of life. Tennesseans now have the potential for increased longevity of life and reductions in illnesses.

The overall death rate remained fairly steady from 1995 to 1999, as the total population increased 4.5 percent. The 1995 rate for blacks of 10.1 was the highest rate for the five-year period, but this rate dropped to 9.5 in 1999. The rate for whites decreased from 10.0 per 1,000 population to 9.9 from 1998 to 1999.

Age-specific death rates for 1999 show the rates increasing after age 14 to the highest levels for the population 85 years and older. Black rates were higher than white rates for every age group. The black infant death rate of 15.2 was 2.7 times higher than the white rate of 5.6 per 1,000 births.

**Death Rates By Race, Resident Data  
Tennessee, 1995-1999**



Population estimates used to calculate rates were revised June 19, 2000.  
(See Note on last page)

**Number of Deaths by Age and Race, With Rates Per 1,000  
Population, Resident Data, Tennessee, 1999**

Age Groups	Total	Rate	White	Rate	Black	Rate
Total	53,506	9.8	45,065	9.9	8,302	9.5
Under 1*	597	7.7	337	5.6	251	15.2
1-4 years	123	0.4	85	0.4	37	0.5
5-14 years	196	0.3	131	0.2	64	0.4
15-24 years	772	1.0	572	1.0	196	1.4
25-44 years	3,315	2.1	2,425	1.8	869	3.4
45-64 years	9,994	7.9	7,997	7.3	1,952	13.0
65-74 years	10,464	26.9	8,870	25.6	1,565	38.5
75-84 years	14,916	61.1	13,066	59.9	1,831	71.5
85+ years	13,120	158.1	11,575	157.8	1,535	162.1

\*Rate for deaths under age one are per 1,000 live births. All other age groups are per 1,000 population. Total includes deaths of other races and deaths with race not stated.

Tennessee's ten leading causes of death accounted for 42,883 or 80.1 percent of the total 53,506 deaths in 1999. Diseases of heart and malignant neoplasms combined accounted for 28,078 or 52.5 percent of the total deaths. The codes used for cause of death were from the Tenth Revision International Classification of Diseases.

*Note: Age-adjustment is a technique that removes the effects that differences in age distributions have on mortality rates for two or more groups being compared. For 1999, the standard population used in the direct method calculations was revised to the 2000 United States estimated population, as recommended by the National Center for Health Statistics. These revised age-adjusted figures may result in rates that differ from previous years.*

### Leading Causes of Death (ICD-10 Codes) With Rates and Age-Adjusted Rates Per 100,000 Population Resident Data, Tennessee, 1999

Cause	Number	Rate	Age-Adjusted Rate
Total Deaths	53,506	975.8	963.8
1. Diseases of heart (I00-I09, I11, I13, I20-I51)	16,191	295.3	292.1
2. Malignant neoplasms (C00-C97)	11,887	216.8	210.7
3. Cerebrovascular diseases (I60-I69)	4,088	74.6	74.3
4. Chronic lower respiratory diseases (J40-J47)	2,739	49.9	48.8
5. Accidents (V01-X59, Y85-Y86)	2,635	48.1	48.1
Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0-V89.2)	1,275	23.3	23.3
6. Influenza and pneumonia (J10-J18)	1,583	28.9	28.9
7. Diabetes mellitus (E10-E14)	1,430	26.1	25.6
8. Alzheimer's disease (G30)	941	17.2	17.3
9. Intentional self-harm (suicide) (X60-X84, Y87.0)	718	13.1	13.0
10. Nephritis, nephrotic syndrome and Nephrosis (N00-N07, N17-N19, N25-N27)	671	12.2	12.1

### Number of Infant and Neonatal Deaths by Race With Rates Per 1,000 Live Births Resident Data, Tennessee, 1999

Infant Deaths	Number	Rate	Neonatal Deaths	Number	Rate
Total	597	7.7	Total	388	5.0
White	337	5.6	White	217	3.6
Black	251	15.2	Black	164	10.0

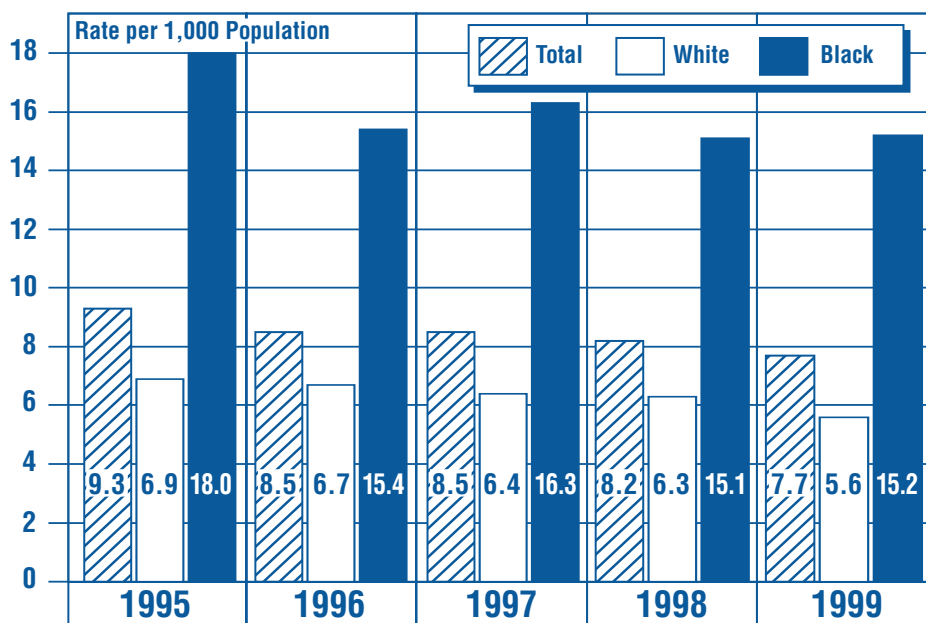
Infant Death - A death of a live-born infant under one year of age.  
Neonatal Death - A death of a live-born infant under 28 days of age.

Tennessee had 597 infant deaths in 1999. The total infant mortality rate per 1,000 live births was 7.7. The number of white infant deaths was 337 with a mortality rate of 5.6. The number of black infant deaths was 251, and the rate was 15.2 per 1,000 live births. The total number of neonatal deaths was 388 with a rate of 5.0. There were 217 white and 164 black neonatal deaths with corresponding rates of 3.6 and 10.0 per 1,000 live births.

### Infant Death Rates By Race, Resident Data Tennessee, 1995-1999

Tennessee's infant death rate declined from 9.3 in 1995 to 7.7 in 1999. The total rate (7.7) was 6.1 percent lower than the rate of 8.2 for 1998. The white rate decreased from 1995 to 1999 and was much lower than the total and black rates for the five-year period. The black rate fluctuated throughout the five-year period, but the 1999 rate of 15.2 was 15.6 percent lower than the rate of 18.0 for 1995.

A decrease in infant deaths has been accomplished in part by early prenatal care, educating mothers on the importance of proper nutrition and good health habits, and informative programs like the "Back to Sleep" campaign. Infant death reduction will continue to be a high priority for health professionals.



*Tennessee's violent death data primarily focuses on assault (homicide) and intentional self-harm (suicide) deaths. Also provided is information on firearm deaths, which includes accidental deaths as well as homicides and suicides due to firearm use. In addition to the 1999 violent deaths, there were five deaths from legal intervention.*

- During 1999, there were 419 homicide deaths among Tennessee residents. The corresponding death rate was 7.6 per 100,000 population.
- In 1999, black deaths accounted for 214 or 51.1 percent of the total homicide deaths.
- Of the total 1999 homicide deaths, 74.2 percent were males while 40.8 percent of the total were black males.
- The number of suicide deaths for 1999 was 718 with a rate of 13.1 per 100,000 population.
- The white population accounted for 664 or 92.5 percent of the total 1999 suicide deaths.
- Of the total 1999 suicide deaths, 80.6 percent were males while 74.1 percent of the total were white males.
- In 1999, suicide was the ninth leading cause of death in Tennessee.

The 1999 homicide death rate for blacks was 24.5 per 100,000 population. This rate was 5.6 times the rate of 4.4 for whites.

The 1999 suicide rate for whites was 14.6. This rate was 2.5 times the rate of 5.8 for blacks.

### Number of Homicide and Suicide Deaths By Race and Gender With Rates Per 100,000 Population Resident Data, Tennessee, 1999

	Homicide		Suicide	
	Number	Rate	Number	Rate
Total	419	7.6	718	13.1
White	201	4.4	664	14.6
White Male	136	6.2	532	24.3
White Female	65	2.8	132	5.6
Black	214	24.5	51	5.8
Black Male	171	42.8	46	11.5
Black Female	43	9.1	5	1.1
Other Races	4	6.5	2	3.3
Other Male	4	13.3	1	3.3
Other Female	-	-	1	3.2
Unknown	-	-	1	-

In 1999, there were 29 homicide deaths and 4 suicide deaths among children under 15 years of age.

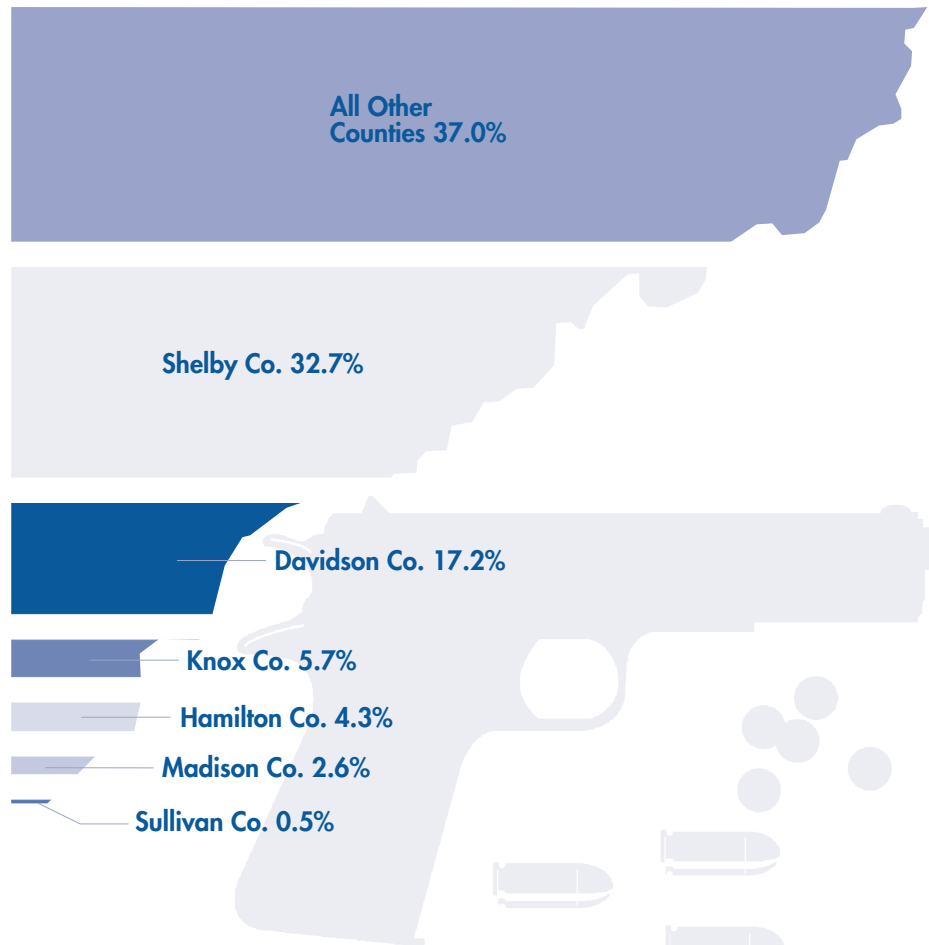
### Number of Homicide and Suicide Deaths By Age With Rates Per 100,000 Population, Resident Data, Tennessee, 1999

Age Groups	Homicide		Suicide	
	Number	Rate	Number	Rate
Total	419	7.6	718	13.1
0-9 years	22	2.8	0	0.0
10-14 years	7	1.8	4	1.0
15-19 years	42	11.1	28	7.4
20-24 years	61	16.6	48	13.1
25-29 years	65	17.3	83	22.1
30-34 years	43	11.2	67	17.4
35-44 years	86	10.2	171	20.2
45-54 years	45	6.1	129	17.4
55-64 years	24	4.6	64	12.3
65-74 years	12	3.1	72	18.5
75-84 years	8	3.3	40	16.4
85+ years	1	1.2	11	13.3
Unknown	3	-	1	-

### Tennessee's Homicide Deaths By Metropolitan and Rural Counties Resident Data, 1999

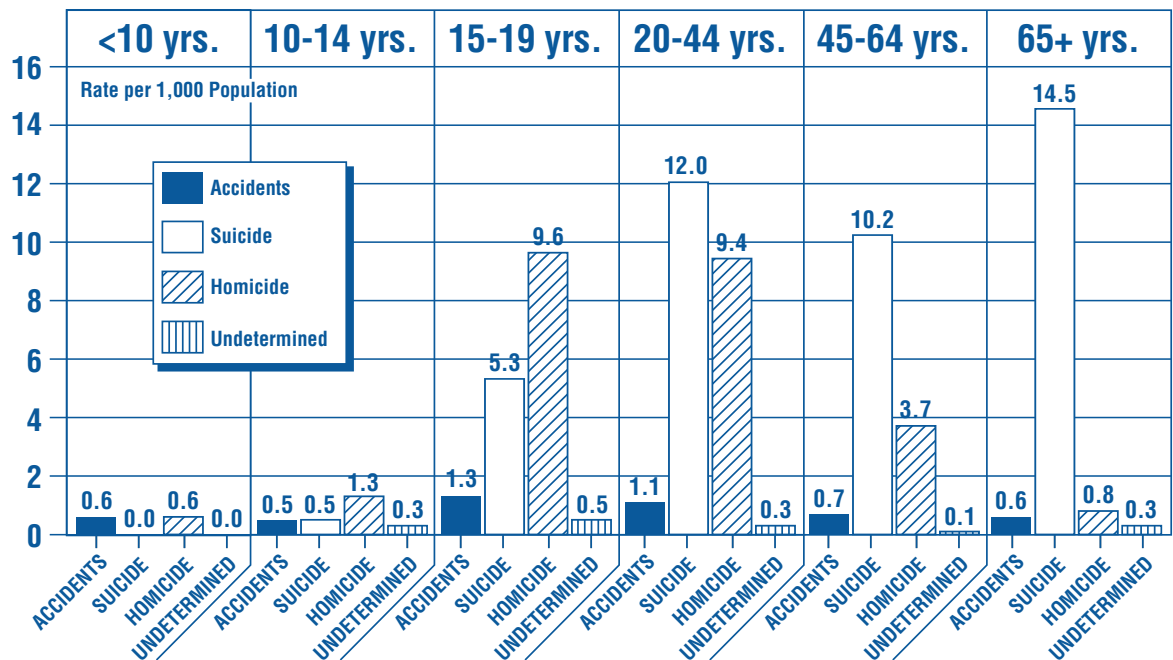
In 1999, Tennessee's homicide mortality by county of residence reveals the highest numbers for residents of Shelby and Davidson Counties. These two counties accounted for 49.9 percent of the state's total number of homicide deaths.

In 1999, ten children under the age of ten years died from firearm injuries. Of these ten deaths, five were accidental and five were homicides. While accidental death is the leading cause of death for young children, violence toward children and youth is of increasing concern. For children ages 10-14, there were 10 firearm deaths. Of these deaths, two were accidental, two were suicides, five were homicides, and one was undetermined. The homicide rate for firearm injury was highest for the 15-19 age group, while the suicide rate was highest for the 65+ years.



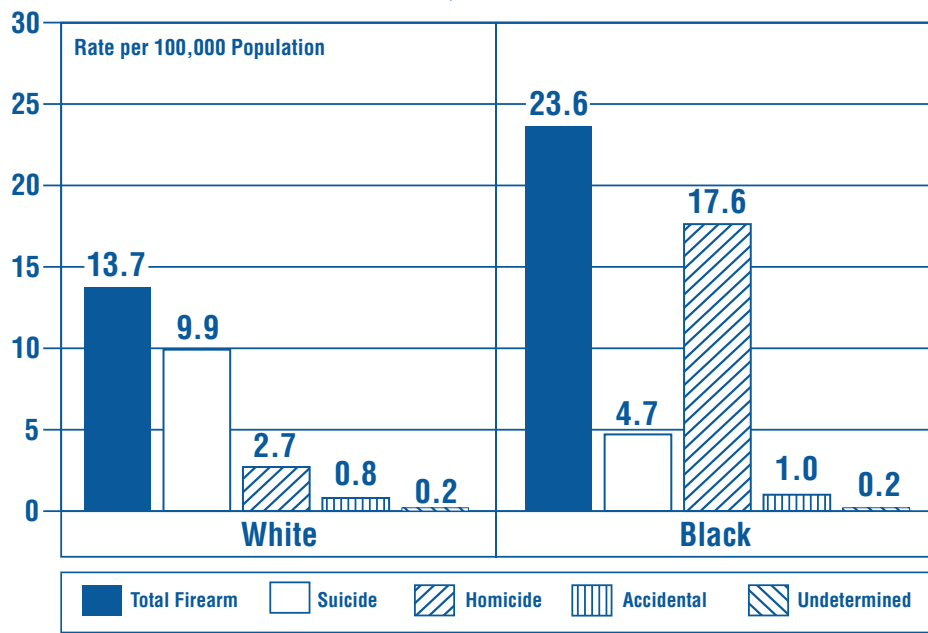
### Firearm Death Rates, By Age Group Resident Data, Tennessee, 1999

Deaths attributed to firearm injury are classified according to ICD-10 codes as follows: accident codes W32-W34; suicide codes X72-X74; homicide codes X93-X95, and undetermined whether accidentally or purposely inflicted, codes Y22-Y24.



Tennessee had 623 firearm deaths for white residents and 206 for black residents in 1999. The firearm death rate for the white population was 13.7 per 100,000 population. The rate for blacks of 23.6 was 1.7 times greater than the white rate. The suicide firearm mortality rate for whites was 2.1 times greater than the rate for blacks, while the homicide firearm death rate for blacks was 6.5 times greater than the white rate. The accidental firearm death rate for blacks was 1.3 percent higher than the white rate, but the undetermined cause was the same for both races.

**Firearm Death Rates, By Race  
Resident Data, Tennessee 1999**



**Number of Firearm Deaths By  
Race and Gender, With Rates Per  
100,000 Population Resident Data,  
Tennessee, 1999**

	Number	Rate
Total	834	15.2
White	623	13.7
White Male	518	23.6
White Female	105	4.5
Black	206	23.6
Black Male	182	45.5
Black Female	24	5.1
Other Races	5	8.2
Other Male	4	13.3
Other Female	1	3.2

For 1999, firearm death rates by gender show that black males had the highest rate (45.5) per 100,000 population. The lowest firearm mortality rate of 3.2 was for other females.

Violent deaths have become an important health issue as it appears that violent behavior has grown to be the course of action for conflict, emotional distress, and criminal activity; but health programs alone are not sufficient to deal with this complicated problem. Implementing prevention programs involves the cooperative efforts of public health, mental health, criminal justice, social services, and professional education. Reducing these preventable deaths is imperative in the goal toward increased longevity of life.

More detailed county level mortality data may be obtained by contacting the Tennessee Department of Health, Office of Health Statistics and Research or by visiting our website at the address listed on the next page.

NOTE: The population estimates for Tennessee used to calculate the rates in this report were based on estimates prepared from the 1990 census by the Department of Sociology at the University of Tennessee in Knoxville. On June 19, 2000 population

projections were revised by Health Statistics and Research. These revised projection figures were based on updated county total estimates released by the Bureau of the Census, and may result in rates that differ from those previously published.

1999  
Total Population  
5,483,535

1999  
White Population  
4,548,426

1999  
Black Population  
874,007



Tennessee Department of Health. Authorization No. 343200, August 2001.

Please visit the **Health Statistics and Research** and **Health Information Tennessee (HIT)** pages at the **Health Data** site on the Tennessee Department of Health website:

<http://www.state.tn.us/health>

*Report of Tennessee Deaths 1999* was published by the Tennessee Department of Health,

Health Statistics and Research,  
Cordell Hull Building, Nashville,  
Tennessee, 37247-5262

Marguerite Lewis, Director  
For additional information please contact:  
George Plumlee, Coordinator,  
(615) 741-1954